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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,110	12/11/2003	Howard Sommerfeld	CRD 01145	7895
7590 03/31/2008 JAMES RAY & ASSOCIATES 2640 Pitcairn Road Monroeville, PA 15146			EXAMINER MC'CARRY JR, ROBERT J	
			ART UNIT 3617	PAPER NUMBER
			MAIL DATE 03/31/2008	DELIVERY MODE PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HOWARD SOMMERFELD

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Appeal 2008-0301  
Application 10/733,110  
Technology Center 3600

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Decided: March 31, 2008

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Before MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and  
MICHAEL W. O'NEILL, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 1 to 21. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellant invented a draft gear assembly (Specification 1).

Claim 1 under appeal reads as follows:

1. A friction clutch mechanism for use in a friction clutch type draft gear assembly, said friction clutch mechanism comprising:

- (a) a pair of outer stationary plate members, each of said pair of outer stationary plate members having an inner and an outer surface, said outer surface being engageable with a respective radially opposed portion of an inner surface of a draft gear housing member adjacent a open end of such housing member;
- (b) a pair of movable plate members, each of said movable plate members having at least a predetermined portion of an outer surface thereof frictionally engageable with a respective said inner surface of said pair of outer stationary plate members for absorbing at least a first portion of heat energy generated during closure of such friction clutch type draft gear assembly;
- (c) a pair of inner stationary plate members, each of said inner stationary plate members having an outer surface thereof frictionally engageable with at least a portion of a respective inner surface of said pair of movable plate

members for absorbing at least a second portion of such heat energy generated during closure of such friction clutch type draft gear assembly, an inner surface of said each of said inner stationary plate members being tapered at a first predetermined angle;

(d) a pair of wedge shoe members, each of said wedge shoe members including

(i) a tapered outer surface frictionally engageable with a respective said inner surface of said tapered stationary plate members for absorbing a third portion of heat energy generated during closure of such friction clutch type draft gear assembly,

(ii) an upper surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative to a longitudinal axis of said friction clutch mechanism, said tapered upper surface being tapered at an angle of between about  $49.0^\circ$  and about  $50.0^\circ$ , and

(iii) a bottom surface tapered from a point disposed inwardly from said tapered outer surface inwardly toward and at an acute angle relative perpendicularly to said longitudinal axis of said friction clutch mechanism; and

(e) a center wedge member, said center wedge member including a pair of correspondingly tapered surfaces frictionally engageable with an upper tapered surface of a respective one of said pair of wedge shoe members for absorbing at least a fourth portion of such heat energy generated during closure of such friction clutch type draft gear assembly.

The Examiner rejected claims 1 to 17 under the judicially created doctrine of double patenting over claims 1, 3, 5, 7 to 10 and 12 of Duffy, U.S. Patent No. 5,590,797.

The Examiner rejected claims 1 to 21 under 35 U.S.C. § 103(a) as being unpatentable over Duffy.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Duffy	5,590,797	Jan. 7, 1997
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Appellant contends that the Examiner erred in rejecting claims 1 to 17 under the judicially created doctrine of double patenting.

Appellant also contends that the Examiner erred in holding that it would have been obvious to a person of ordinary skill in the art to modify the friction clutch disclosed in Duffy so as to include a wedge shoe member having an upper surface tapered at an angle between 49 and about 50 degrees and a lubricating insert member formed of a mixture of a pre-selected lubricating metal and at least 2% graphite.

## ISSUES

The first issue is whether the Appellant has shown that the Examiner erred in rejecting claims 1 to 17 under the judicially created doctrine of double patenting.

The second issue is whether the Appellant has shown that the Examiner erred in finding that it would have been obvious to modify the device disclosed in Duffy so as to include a wedge shoe member having an upper surface tapered at an angle between about 49 and about 50 degrees and a first lubricating insert member formed of a mixture of a pre-selected lubricating metal and at least 2% graphite.

## FINDINGS OF FACT

The Duffy patent discloses a friction clutch which includes a wedge shoe member having an upper surface tapered at an angle of between 46.5 and 48.5 degrees (col. 5, ll. 48 to 49).

Duffy discloses a lubricating insert member 28 formed from a lubricating metal which is preferably a brass alloy (col. 8, ll. 25 to 27).

Claims 1, 3, 5, 7 to 10 and 12 of the Duffy patent do not recite a clutch which includes a wedge shoe member having an upper surface tapered at an angle between 49 and 50 degrees or a lubricating member formed of a pre-selected lubricating metal and at least 2% graphite.

## ANALYSIS

### *Double patenting*

The Examiner's reason for making this rejection is the Examiner's belief that the decision of *In re Schneller*, 397 F.2d 350 (CCPA 1968) is applicable to the facts present in this appeal. However, this is not the case. The *Schneller* court cautioned "against the tendency to freeze into rules of general application what, at best, are statements applicable to particular fact situations." *Schneller*, 397 F.2d at 355. As such, the *Schneller* court did not establish a rule of general application and its application is limited to the particular set of facts set forth in that decision. Those facts were: (1) the *Schneller* application was a continuation of an intermediate application which was a divisional of the application for which the *Schneller* patent issued from and (2) everything disclosed in the *Schneller* application was disclosed in the *Schneller* patent and the *Schneller* patent disclosed additional matter. *Id.* at 352. This particular set of facts does not appear to be present within the record of this appeal. Therefore, we will not sustain this rejection.

### *Obviousness*

Duffy discloses a wedge shoe member having an upper surface tapered at an angle between 46.5 and 48.5 degrees. Appellant's claim 1 recites a wedge shoe member having an upper surface that is tapered at an angle of 49 to 50 degrees.

We are not persuaded by the Appellant's argument that the Examiner erred in rejecting claim 1 because Duffy does not disclose or suggest the

claimed taper angle for the upper surface of the wedge shoe member. We note that the discovery of an optimum value of a result effective variable (in this case, the optimum angle for taper of the upper surface of the wedge shoe) is ordinarily within the skill of the art. See *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980) and *In re Aller*, 220 F.2d 454, 456 (CCPA 1955). As stated in *In re Huang*, 100 F.3d 135, 139 (Fed. Cir. 1996):

This court and its predecessors have long held, however, that even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art, unless the claimed ranges "produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art."

Additionally, as stated in *In re Woodruff*, 919 F.2d 1575, 1578 (Fed. Cir. 1990):

The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . These cases have consistently held that in such a situation, the applicant must show that the particular range is *critical*, generally by showing that the claimed range achieves unexpected results relative to the prior art range [citations omitted].

In the present case, however, the Appellant has not even alleged, must less established, that the claimed produces unexpected results.



Therefore, we are of the opinion that it would have been obvious to one of ordinary skill in the art at the time of Appellant's invention to optimize the angle of the wedge shoe upper surface. Accordingly, the Examiner's rejection of claim 1 under 35 U.S.C. § 103 as being unpatentable over Duffy is sustained. We will also sustain the rejection of claims 2, 3, 5, 7, 9 to 14, and 16 because the Appellant has not argued the separate patentability of these claims.

We will not sustain this rejection as it is directed to claims 4, 6, 8, 15, and 17. Claims 4, 6, 8, 15, and 17 recite that the lubricating insert member is formed of a pre-selected lubricating metal and at least 2% graphite. There is no disclosure or suggestion in Duffy of a lubricating insert member comprised of a pre-selected lubricating metal and at least 2% graphite. We are not persuaded by the Examiner's argument that the recitation of a lubricating insert member formed of a pre-selected lubricating metal suggests a lubricating insert member formed of a pre-selected lubricating metal and at least 2% graphite. No such suggestion of 2% graphite is found in Duffy.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED-IN-PART

Appeal 2008-0301  
Application 10/733,110

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